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EXAMINER

HERRON II, D

ART UNIT

PAPER NUMBER

3619

4

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/145,381

Applicant(s)

Sauter

Examiner

David E Herron II

Group Art Unit

3619



☒ Responsive to communication(s) filed on Sep 1, 1998

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-34 is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-34 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2,3

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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DETAILED ACTION

Claim Objections

1. Claim 30 is objected to because of the following informalities: The phrase “without contacting either the carrier frame or the elastomeric layer *to limit the amount of vibrational energy ...*” is capable of two distinct and diverse interpretations. For example, the claimed purpose of the lack of contact could be to limit the vibration; additionally, the purpose of the CONTACT could be to inhibit the vibration. While this minor informality does not rise to the level of statutory indefiniteness, appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by any one of Artus, Roman et al., or Nicoletti, or Wilder.

Artus discloses a skate frame for an inline skate comprising an elongate first structural member (2) having first and second sidewalls (See Fig 2) depending downwardly from a first

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upper surface (4,5), the lower ends of the sidewalls being spaced to receive wheels (3) therebetween, and vibration dampening means (6) integrally formed with the sidewalls of the first structural member (2) for absorbing at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate traverses the surface.

Nicoletti discloses a skate frame (21) for an inline skate comprising an elongate first structural member (9) having first (17) and second (18) sidewalls depending downwardly from a first upper surface (12), the lower ends of the sidewalls being spaced to receive wheels (11) therebetween, and vibration dampening means (8,9) integrally formed with the sidewalls of the first structural member (17, 18) for absorbing at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate traverses the surface.

Roman et al. discloses a skate frame for an inline skate (2) comprising an elongate first structural member (15) having first (8) and second sidewalls (9) depending downwardly from a first upper surface (See Fig 3), the lower ends of the sidewalls being spaced to receive wheels (14) therebetween, and vibration dampening means integrally formed with the sidewalls of the first structural member (2) for absorbing at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate traverses the surface (see Fig 2).

Wilder discloses a skate frame (10) for an inline skate comprising an elongate first structural member (2) having first (20) and second (22) sidewalls (See Fig 2) depending downwardly from a first upper surface (12,14), the lower ends of the sidewalls being spaced to receive wheels (See Fig 1,2,3) therebetween, and vibration dampening means (36,44) integrally

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formed with the sidewalls (20,22) of the first structural member (20,22) for absorbing at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate traverses the surface.

4. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Malewicz.

Regarding Claim 1, Malewicz discloses a skate frame (32) for an inline skate (10) comprising an elongate first structural member (14) having first (32) and second (34) sidewalls (See Fig 2) depending downwardly from a first upper surface (293), the lower ends of the sidewalls being spaced to receive wheels (16) therebetween, and vibration dampening means (130,160) integrally formed with the sidewalls (32,34) of the first structural member (14) for absorbing at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate traverses the surface.

Regarding claim 2, Malewicz further discloses that the vibration dampening means comprises a contoured portion (130, 160) of each of the first (32) and second (34) sidewalls of the first structured member (14), the contoured portion (160) having a predetermined cross-sectional shape to permit the sidewalls to flex (impliedly disclosed at col 6, lines 1-15; Malewicz discloses a flexible, lightweight fiberglass polyamide frame) thereby absorbing at least a portion of the vibrational energy associated with traversing the surface.

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Regarding Claim 3, Malewicz further discloses that the cross-sectional shape of the first and second sidewalls is substantially arcuate (see fig 6) such that the contoured portion of the sidewalls flexes to absorb at least a portion of the vibrational energy.

Regarding claim 4, Malewicz further discloses that the arcuate cross-sectional shape of the first and second sidewalls is substantially C-Shaped in configuration (see fig 2), the arcuate cross-sectional shape having an upper end (200) spaced from a lower end (110) by a concave portion (136).

Regarding claim 5, Malewicz further discloses that the concave portion (136) of the first sidewall (32) faces the concave portion (166) of the second sidewall (34) in an opposed manner such that the first structural member (12) is tubular.

Regarding Claim 6, Malewicz further discloses a second structural member (110, 118) having first (115) and second (123) sidewalls held in parallel disposition by a second upper wall, the second structural member having an open lower end sized to receive the wheels (16A) therebetween, the second structural member having a width (41) sized to be received within the first structural member such that the sidewalls of the first structural member (32) overlap at least a portion of the sidewalls of the second structural member (see Fig 2).

Regarding claim 7, Malewicz further discloses that the vibration dampening means comprises a contoured portion (170) of each of the first and second sidewalls (32, 34) of the first structural member, the contoured portion having a predetermined cross sectional shape to permit

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to sidewalls to flex, thereby absorbing at least a portion of the vibrational energy associated with traversing the surface.

Regarding claim 8, Malewicz further discloses that the cross-sectional shape of the sidewalls of the first (32) and second (34) structural members is substantially arcuate (see Fig 2), such that the arcuate cross-sectional shape of the sidewalls flexes to absorb at least a portion of the vibrational energy (Col 3, line 65- Col 4, line 10), wherein the arcuate cross-sectional shape of the first and second sidewalls is substantially C-shaped in configuration, the arcuate cross-sectional shape of each sidewall has an upper end spaced from a lower end by a concave portion.

Regarding claim 9, Malewicz further discloses that the concave portion (136) of the first sidewall (32) of the first (upper, curved 32) and second (110) structural members faces the concave portion of the second sidewall of the first (118) and second (upper, curved 34) structural members in an opposed manner. See Fig 2.

5. Claims 2-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Artus.

Artus discloses each of the elements of parent claim 1, as set forth above.

Regarding claim 2, Artus further discloses that the vibration dampening means comprises a contoured portion (122) of each of the first (2) and second (2) sidewalls of the first structural member (14), the contoured portion (122) having a predetermined cross-sectional shape to permit the sidewalls to flex thereby absorbing at least a portion of the vibrational energy associated with traversing the surface. See, e.g Col 3, lines 35-45.

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Regarding Claim 3, Artus further discloses that the cross-sectional shape of the first and second sidewalls is substantially arcuate (see fig 6) such that the contoured portion of the sidewalls flexes to absorb at least a portion of the vibrational energy.

Regarding claim 4, Artus further discloses that the arcuate cross-sectional shape of the first and second sidewalls is substantially C-Shaped in configuration (see fig 5), the arcuate cross-sectional shape having an upper end (See Fig 5) spaced from a lower end by a concave portion. Id.

Regarding claim 5, Artus further discloses that the concave portion (10) of the first sidewall (2) faces the concave portion (10) of the second sidewall (2) in an opposed manner such that the first structural member (2) is tubular.

Regarding Claim 6, Artus further discloses a second structural member (10) having first (10) and second (2) sidewalls held in parallel disposition by a second upper wall (11), the second structural member (2) having an open lower end (see fig 4,6) sized to receive the wheels (3) therebetween, the second structural member having a width (See fig 4, 5,6) sized to be received within the first (10) structural member such that the sidewalls (11) of the first structural member (10) overlap at least a portion of the sidewalls of the second (2) structural member (see Fig 5).

Regarding claim 7, Artus further discloses that the vibration dampening means (fig 6) comprises a contoured portion (10) of each of the first (2) and second (11) sidewalls of the first structural member, the contoured portion (10) having a predetermined cross sectional shape to

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permit the sidewalls to flex, thereby absorbing at least a portion of the vibrational energy associated with traversing the surface. See, e.g Col 3, lines 35-45.

Regarding claim 8, Artus further discloses that the cross-sectional shape of the sidewalls of the first (2) and second (11) structural members is substantially arcuate (see Fig 6), such that the arcuate cross-sectional shape of the sidewalls flexes to absorb at least a portion of the vibrational energy (Col 3, line 25-35), wherein the arcuate cross-sectional shape of the first and second sidewalls is substantially C-shaped in configuration, the arcuate cross-sectional shape of each sidewall has an upper end spaced from a lower end by a concave portion.

Regarding claim 9, Artus further discloses that the concave portion (See Fig 5 or 6) of the first sidewall (2) of the first (2) and second (10) structural members faces the concave portion (Fig 5 or 6) of the second sidewall (2) of the first (2) and second (10) structural members in an opposed manner. See Figs 4 and 5.

6. Claims 14 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Malewicz.

a) an elongate first structural member (14) having downwardly depending first (32) and second (34) sidewalls, the lower ends of the sidewalls being spaced to receive wheels (16) therebetween;

b) an elongate second structural member (110, 118) having downwardly depending first (112, 120, respectively) and second (115, 123, respectively) sidewalls, the sidewalls of the

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second structural (110,118) member being spaced to receive the first and second structural member therebetween, such that the sidewalls of the second structural member overlap at least a portion of the sidewalls of the first structural member (see fig 2);

c) and vibration dampening member (130,160) integrally formed with the sidewalls (32,34) of the first and second structural members (32,14) for absorbing at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate traverses the surface.

Regarding claim 15, Malewicz further discloses that the vibration dampening member comprises contouring the sidewalls of both the first and second structural members to a predetermined cross-sectional shape to permit the sidewalls to flex, thereby absorbing at least a portion of the vibrational energy associated with traversing the surface. Col 6, lines 1-15.

7. Claims 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Artus. Artus discloses a skate frame comprising an elongate first structural member (10) having downwardly depending first and second sidewalls (see fig 4,6), the lower ends of the sidewalls being spaced to receive the wheels (3) therebetween; an elongate second structural member (2) having downwardly depending first and second sidewalls (2), the sidewalls of the second structural member being spaced to receive the first structural member therebetween, such that the sidewalls of the second structural member overlap at least a portion of the sidewalls of the first structural member and a vibration dampening member integrally (122) formed with the sidewalls

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of the first (10) and second (2) structural members for reducing the amount of vibrational energy transmitted from the surface to the shoe portion when the skate traverses a surface.

Regarding Claim 15, Artus further discloses that the dampening member (121,122) comprises contouring (see fig 6) the sidewalls of both the first and second structural (10 and 2, respectively) members to a predetermined cross sectional shape to permit the sidewalls to flex, thereby absorbing at least a portion of the vibrational energy associated with traversing the surface. See, Col 3 lines 30-45.

Regarding claim 16, Argus further discloses that the cross-sectional shape of the sidewalls of both the first and second structural members is substantially arcuate such that the arcuate cross-sectional shape of the sidewalls flexes to absorb at least a portion of the vibrational energy (col 3, lines 30-45), wherein the arcuate cross-sectional shape of the first and second sidewalls of the first (10) and second (2) structural members is substantially C-shaped in configuration, the arcuate cross-section of each sidewall has an upper end spaced from a lower end by a concave portion.

8. Claims 20, 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Malewicz.

Malewicz discloses a skate frame comprising the following:

a) an elongate carrier frame (14) having first (32) and second (34) sidewalls held in spaced parallel disposition by a first upper wall (32) and an open lower end spaced to receive the wheels (16) therebetween; and,

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b) an elongate outer shell (110, 118) having first (112, 120, respectively) and second (115, 123, respectively) sidewalls and an open lower end, the sidewalls of the outer shell (110, 118) overlap at least a portion of the sidewalls of the carrier frame (14), the sidewalls of the carrier frame and the outer shell having a predetermined cross sectional shape to permit the sidewalls to flex, thereby absorbing at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate traverses the surface.

Regarding claim 21, Malewicz further discloses that the cross-sectional shape of the sidewalls (32, 34) of the carrier frame (14) and the outer shell is substantially arcuate (see fig 2 or 6), such that the arcuate cross-sectional shape of the sidewalls flexes to absorb at least a portion of the vibrational energy, wherein the arcuate cross sectional shape of the first and second sidewalls of the carrier frame and the outer shell is substantially C-shaped in configuration, the arcuate cross-section of each sidewall has an upper end spaced from a lower end by a concave portion. See fig 2 or 6.

9. Claims 20, 21, 26, 27, 32 and 34 are rejected under 35 U.S.C. 102(e) as being anticipated by Artus. LM

Regarding Claim 20, Artus discloses the following

a) an elongate carrier frame (See fig 4) having first and second sidewalls (2) held in spaced parallel disposition by a first upper wall (4) and an open lower end spaced to receive the wheels (3) therebetween; and,

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b) an elongate outer shell (10) having first and second sidewalls and an open lower end, the sidewalls of the outer shell (10) overlap at least a portion of the sidewalls of the carrier frame, the sidewalls of the carrier frame and the outer shell having a predetermined cross sectional shape to permit the sidewalls to flex, thereby absorbing at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate traverses the surface.

Regarding claim 21, Artus further discloses that the cross-sectional shape of the sidewalls (32, 34) of the carrier frame and the outer shell (10) is substantially arcuate (see fig 6), such that the arcuate cross-sectional shape of the sidewalls flexes to absorb at least a portion of the vibrational energy, wherein the arcuate cross sectional shape of the first and second sidewalls of the carrier frame and the outer shell is substantially C-shaped in configuration, the arcuate cross-section of each sidewall has an upper end spaced from a lower end by a concave portion. See fig 2 or 6.

Regarding claim 26, and referring to Fig 4 and 12, Artus discloses

- a. a skate frame comprising an elongate outer shell (21) having first and second sidewalls and an open lower end (see fig 4, 12);
- b. an elongate carrier frame (2) having first and second sidewalls (see Fig 4 and 12), the sidewalls of the outer shell (21) are spaced to receive the carrier frame therebetween such that the sidewalls of the outer shell overlap at least a portion of the sidewalls of the carrier frame (see Fig 4 and 12); and,

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c. An elastomeric shear layer disposed (i.e., 242) between the carrier frame (2) and the outer shell (21) to absorb at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate traverses the surface.

Regarding claim 27, Artus further discloses that the carrier frame comprises a first upper wall and an open lower end spaced to receive the wheels therebetween.

Regarding claim 28, Artus further discloses that the sidewalls of the carrier frame have a pre-determined cross sectional shape to permit the sidewalls to flex, thereby absorbing at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate transverses the surface.

Regarding claim 32, Artus further discloses that the that the skate frame further comprises a gap (which is filled by an elastomer; see figs 12 and 14) between the outer shell (21) and the carrier frame (2) to absorb at least a portion of the vibrational energy transmitted to the shoe portion (1).

Regarding claim 34, the method set forth therein is an inherent method of creating the structure set forth in claim 26, and is rejected accordingly.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11 Claims 10-13, 17-19, 22-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Artus.

Regarding claims 10-12, the embodiment depicted by Figures 4 and 6 of Artus discloses each of the elements of parent claims 6 and 9, as set forth above. Additionally, Artus discloses that the sidewalls of the first structural member (2) extend to the lower end of the arcuate cross-sectional shape of the second structural member (10), but fails to disclose that the frame further comprises an elastomeric shear layer (122) disposed between the first (2) and second (11) structural members when the first structural member is received within the second structural member, the shear layer (122) absorbs at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate traverses the surface. Rather, this structure is depicted in the embodiments disclosed in either of figures 12 or 14. See, Claim 1; Col 4, lines 50-60. It would have been obvious to one having ordinary skill in the art to combine the embodiments disclosed in Artus to design a skate frame having an elastomeric shear layer disposed between the first and second structural members when the first structural member is received within the second structural member in order for the shear layer to absorb a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate traverses the surface.

Regarding claim 13 Figure 6 of Artus discloses all of the elements set forth in parent claim 12, as set forth above. In contrast, Figure 6 does NOT disclose that the skate frame further comprises a rectangular first and second wheel attachment flanges depending downwardly from

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the lower ends of the arcuate cross-sectional shape of the second structural member, wherein the wheels are journaled to the attachment flanges to increase the vibration energy absorption by isolating the wheels from the first structural member.

In contrast, however, the embodiment in Fig 12 of Artus depicts a rectangular first and second wheel attachment flanges (21) depending downwardly from the lower ends of the arcuate cross-sectional shape of the second structural member (2), wherein the wheels (3) are journaled to the attachment flanges (2) to increase the vibration energy absorption by isolating the wheels from the first structural member (21). It would have been obvious to one having ordinary skill in the art to combine the two embodiments of Artus to include a skate frame wherein the wheels are journaled to the attachment flanges to increase the vibration energy absorption by isolating the wheels from the first structural member.

Regarding claim 17, Figures 4 and 6 of Artus depict an embodiment which discloses each of the elements of parent claim 16, but fails to disclose an elastomeric shear layer disposed between the first (10) and second (2) structural members when the first structural member is received within the second structural member, the shear layer absorbs at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate traverses the surface. In contrast, the embodiments depicted in figures 12 and 14 both depict an elastomeric shear layer (Fig 12--21; Fig 14 -- 242) disposed between the first (Fig 12--21 Fig 14--241) and second (2) structural members when the first structural member is received within the second structural member, the shear layer absorbs at least a portion of the vibrational energy transmitted

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from the surface to the shoe portion when the skate traverses the surface. (Col 3, lines 30-45). It would have been obvious to combine the embodiment depicted in Figures 4 and 6 of Artus with either the embodiment in Figure 12 or 14 to include an elastomeric shear layer disposed between the first and second structural members when the first structural member is received within the second structural member, the shear layer absorbs at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate traverses the surface.

Regarding claim 18 Figures 4 and 6 of Artus combine with the embodiments in Figures 12 or 14 to disclose all of the elements set forth in parent claim 16, as set forth above, but does not disclose the elements of independent claims 18. Figure 10, however, depicts an embodiment having sidewalls of the first structural member (61) that extend to the lower end of the second structural member (2). It would have been obvious to one having ordinary skill in the art to combine the embodiment in Figure 6 of Artus with the embodiment in Figure 10 of Artus to include sidewalls of the first structural member which extend to the lower end of the arcuate cross-sectional shape of the second structural member in order to provide greater damping structure near the axle of the wheels, where the vibrations are greater and more pronounced.

Regarding Claim 19, Figures 6 and 10 of Artus combine to disclose each of the elements of parent claim 18, as depicted above, but does not disclose the combination including the limitations set forth in claim 19. Rather, the embodiments depicted in figures 12 and 14 both depict an elastomeric shear layer (Fig 12--21; Fig 14 -- 242) disposed between the first (Fig 12--

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21 Fig 14--241) and second (2) structural members when the first structural member is received within the second structural member, the shear layer absorbs at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate traverses the surface. (Col 3, lines 30-45). It would have been obvious to combine the embodiment depicted in Figures 4 and 6 of Artus with either the embodiment in Figure 12 or 14 to include an elastomeric shear layer disposed between the first and second structural members when the first structural member is received within the second structural member, the shear layer absorbs at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate traverses the surface.

11. Claim 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Artus. In the embodiment disclosed in Figures 4 and 6, Artus depicts each of the elements of parent claims 20 and 21, as set forth above, but does not disclose an elastomeric shear layer disposed between the carrier frame and the outer shell (10) when the carrier frame is received within the outer shell, the shear layer absorbs at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate transverses the surface.

In contrast, in the embodiments depicted in either Figure 12 or 14, Artus discloses an elastomeric shear layer disposed between the carrier frame (2) and the outer shell (21) when the carrier frame (2) is received within the outer shell (21), the shear layer (i.e, 242) absorbs at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the

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skate transverses the surface. It would have been obvious to combine the embodiments disclosed by Artus to design a skate frame having an elastomeric shear layer disposed between the carrier frame and the outer shell wherein the carrier frame is received within the outer shell so that the shear layer absorbs at least a portion of the vibrational energy transmitted from the surface to the shoe portion when the skate transverses the surface.

Figures 4,6,12 and 14 of Artus combine to disclose each of the elements of parent claim 23, as set forth above. However, this combination does not disclose that the sidewalls of the first structural member extend to the lower end of the second structural member. In contrast, figure 10 depicts sidewalls of the first structural (2) member extends to the lower end of shape of the second structural member (61). It would have been obvious to combine the embodiments disclosed by Artus to design a skate frame having sidewalls of the first structural member extend to the lower end of the arcuate cross-sectional shape of the second structural member in order to place a dampening device at the open end of the structure, where vibration is greatest.

12. Claim 25, 29,30,31,33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Artus in view of Malewicz.

Regarding claim 25, Artus discloses all of the elements of parent claim 24, but does not disclose that the skate frame further comprises a rectangular first and second wheel attachment flange depending downwardly from the lower ends of the arcuate sectional shape of the carrier frame, the wheels are journaled to the wheel attachment flanges to increase the vibration energy absorption by isolating the wheels from the outer shell. Malewicz discloses a skate frame having

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a rectangular first (110) and second (118) wheel attachment flange depending downwardly from the lower ends of the arcuate sectional shape of the carrier frame (32,34), the wheels (2) are journaled to the wheel attachment flanges (110, 118) to increase the vibration energy absorption by isolating the wheels from the outer shell. It would have been obvious to modify the skate frame of Artus in accord with the teaching of Malewicz to include rectangular first and second wheel attachment flanges depending downwardly from the lower ends of the arcuate sectional shape of the carrier frame in order to increase the vibration energy absorption by isolating the wheels from the outer shell.

Artus discloses all of the elements of parent claim 28, but does not clearly depict the remaining limitations set forth in claims 29-31.

Regarding claim 29, Malewicz discloses a skate frame wherein the sidewalls (32,34) are substantially arcuate (Fig 6) such that the arcuate cross-sectional shape of the sidewalls flexes to absorb at least a portion of the vibrational energy, wherein the arcuate cross sectional shape of the first and second sidewalls is substantially C-shaped in configuration, the arcuate cross section of each sidewall (32,34) has an upper end(293) spaced from a lower end (285,283, respectively) by a concave portion (296,297, respectively). It would have been obvious to one having ordinary skill in the art to modify the skate frame of Artus in accord with the teaching of Malewicz in to include sidewalls having arcuate cross sectional shape in order to absorb at least a portion of the vibrational energy created during skating.

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Regarding claim 30, Malewicz discloses that the shoe portion (12) is attached to the outer shell of the skate frame by an attachment bolt (80) extending through the skate frame without contacting an elastomeric layer to limit the amount of vibrational energy transmitted to the shoe portion. It would have been obvious to one having ordinary skill in the art to modify the skate frame of Artus in accord with the teaching of Malewicz to include an attachment bolt extending through the skate frame without contacting an elastomeric layer, in order to limit the amount of vibrational energy transmitted to the shoe portion.

Regarding claim 31, Malewicz further discloses that the wheels (16) are attached to the carrier frame (110,118) to further limit the amount of vibrational energy transmitted to the shoe portion. It would have been obvious to one having ordinary skill in the art to modify the skate frame of Artus in accord with the teaching of Malewicz to attach the wheels to the skate frame to further limit the amount of vibrational energy transmitted to the shoe portion of the skate.

Regarding the method set forth in claim 33, this method is an inherently obvious method of creating the structure set forth in claim 29, and is rejected accordingly.

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Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Oyen et al (5,579,489) Pozzobon, et al. (5,366,232), Oyen (5,951,027), Keleny et al. (5,947,487), Oliemans et al (5,904,360), Gignoux et al (5,890,724), Benoit (5,890,723), Hu, et al (5,775,707), Foffano et al (5,720,488), Oilemans et al (5,704,620), Maggiore (5,620,190) each disclose a relevant skate apparatus.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David E. Herron II whose telephone number is (703) 306-4612. In the event efforts to reach the examiner are unsuccessful, the applicant may contact the examiner's supervisor, Lanna Mai, at (703) 308-2486.



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December 4, 1999